REMARKS

Applicants respectfully request reconsideration. Claims 1-46, 48, 51-53 and 56-85 were pending in the application with claims 1-44 and 56-71 being withdrawn. By this amendment, claims 1-44 and 56-71 have been canceled. Claim 45 has been amended. New claims 86-102 have been added. No new matter has been added. Claims 45, 46, 48, 51-53 and 72-102 are now pending in this application with claim 45 being the sole independent claim.

Rejection of Claims 45 and 51

Claims 45 and 51 are rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,267,948 (Vo-Dinh).

Applicants do not concede that Vo-Dinh renders unpatentable the claims pending prior to amendment herein. However, solely to advance the patent application process, Applicants have amended independent claim 45 to recite flowing in series in the microfluidic channel a predetermined sequence of fluid plugs including first, second and third fluids, wherein the first and second fluids are separated by the third fluid which is immiscible with both the first and second fluids. These amendments are supported in, for example, page 19, line 12 to page 20, line 2 of the specification as filed. Such features are not disclosed or suggested by Vo-Dinh.

Because Vo-Dinh fails to disclose or suggest each claim limitation, amended independent claim 45 is patentable over Vo-Dinh. Claim 51 depends from independent claim 45, and, thus, is also patentable over Vo-Dinh for at least this reason.

Accordingly, Applicants respectfully request withdrawal of the claim rejections on this ground.

Rejection of Claims 45, 52, 53, 72-79 and 83-85

Claims 45, 52, 53, 72-79 and 83-85 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Publication No. 2003/0064507 (Gallagher) in view of U.S. Publication No. 2003/0215865 (Mayer).

Applicants do not concede that the combination of Gallagher in view of Mayer renders unpatentable the claims pending prior to amendment herein. However, solely to advance the patent

application process, Applicants have amended independent claim 45, as noted above, to recite flowing in series in the microfluidic channel a predetermined sequence of fluid plugs including first, second and third fluids, wherein the first and second fluids are separated by the third fluid which is immiscible with both the first and second fluids. Such features are not disclosed or suggested by Gallagher or Mayer. Therefore, even if one combined the teachings of Gallagher in view of Mayer in the manner stated in the Office Action, all of the recited features in independent claim 45 would not be disclosed or suggested. Thus, independent claim 45, and the claims that depend therefrom, are patentable over the asserted combination of Gallagher in view of Mayer.

Accordingly, Applicants respectfully request withdrawal of the claim rejections on this ground.

Rejection of Claim 80

Claim 80 is rejected under 35 U.S.C. §103(a) as being unpatentable over Gallagher in view of Mayer, as applied to claim 45 above, in light of U.S. Patent No. 5,318,621 (Krulik).

Claim 80 depends indirectly from independent claim 45, which Applicants believe is patentable for the reasons noted above. Furthermore, Krulik does not disclose or suggest the limitations missing in Gallagher and Mayer for independent claim 45. Therefore, even if one combined the teachings of Gallagher in view of Mayer in light of Krulik in the manner stated in the Office Action, all of the recited features in independent claim 45 would not be disclosed or suggested. Independent claim 45, and, therefore, claim 80, are patentable over the combination of Gallagher in view of Mayer in light of Krulik.

Accordingly, Applicants respectfully request withdrawal of the claim rejection on this ground.

Rejection of Claim 81

Claim 81 is rejected under 35 U.S.C. §103(a) as being unpatentable over Gallagher in view of Mayer, as applied to claim 72, further in view of U.S. Patent No. 69,333,200 (Kaler).

Claim 81 depends indirectly from independent claim 45, which Applicants believe is patentable for the reasons noted above. Furthermore, Kaler does not disclose or suggest the

limitations missing in Gallagher and Mayer for independent claim 45. Therefore, even if one combined the teachings of Gallagher in view of Mayer and further in view of Kaler in the manner stated in the Office Action, all of the recited features in independent claim 45 would not be disclosed or suggested. Independent claim 45, and, therefore, claim 81, are patentable over the combination of Gallagher in view of Mayer and further in view of Kaler.

Accordingly, Applicants respectfully request withdrawal of the claim rejection on this ground.

New Claims

New claims 86-102 have been added, each of which is supported in the specification as filed. New claims 86-102 each depend, directly or indirectly, from independent claim 45 which is believed to be patentable for the reasons noted above. No new matter has been added.

In view of the above amendment, Applicants believe the pending application is in condition for allowance.

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Respectfully submitted,

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